

Appl No. 09/706,937

Amdt. dated September 30, 2005

Request for continued examination following final Office action of June 30, 2005

REMARKS

This amendment accompanies the filing of a REQUEST FOR CONTINUED EXAMINATION following a Final Office Action mailed on June 30, 2005. The Office Action rejected Claims 2, 3, 5, 6, 9 and 10 as anticipated by U.S. Pat. No. 6,609,062 ("Hancock"). The Office Action rejected Claims 1, 8 and 14 as obvious in view of the combination of Hancock and U.S. Pat. No. 6,252,605 ("Beesley"), rejected Claims 4 and 11 as obvious in view of the combination of Hancock and U.S. Pat. No. 6,327,535 ("Evans") and rejected Claim 12-13 as obvious in view of the combination of Hancock and U.S. Pat. No. 6,470,287 ("Smartt").

Applicants have amended Claims 1-3 and 8-14 to clarify the subject matter of the claimed invention. Applicants respectfully request reconsideration of the pending claims in view of the following remarks. Applicants submit that all of the pending claims in the present application are allowable, as explained below.

Independent Claim 1

Applicants' independent Claim 1 relates to an index for a geographic database. The index has a structure that includes three dimensions. A first dimension includes latitude boundary information, and a second dimension includes longitude boundary information. The data indexed by the structure are searchable using a latitude and a longitude. The data that represent geographic features are organized into layers based on a rank associated with the features. A third dimension of the index structure includes rank information, and the data indexed by the structure are searchable for the rank. Applicants' independent Claim 1 was rejected as being obvious in view of the combination of Hancock and Beesley. Amended Claim 1 is not obvious because the combination does not disclose all of the elements of this claim.

First, Applicants will address the positions on pages 9-10 of the final Office Action. The Office Action indicated that Hancock teaches an index for data representing geographic features by citing the codes of a universal location address. An example of the codes in the universal location address is U.S.CA.LA.11.17.18.12 wherein US indicates United States

Appl. No. 09/706,937

Amdt. dated September 30, 2005

Request for continued examination following final Office action of June 30, 2005

(country code), CA indicates California (state code), LA indicates Los Angeles grid (city code), 11 indicates the location is within cell 11 of the Los Angeles grid (cell code). The remaining digits of the address indicate sub-grids and sub-cells that provide greater resolution of cell 11 to pin point the location. (*see*: Hancock, column 5, lines 45-63).

Applicants respectfully point out that the universal location address of Hancock does not provide the index for a geographic database with the recited feature of "data that represent geographic features indexed by said structure are searchable spatially using a latitude and a longitude." Rather, the codes of Hancock's universal location address only represent a single location in a proprietary geographical referencing system having nesting grid structures. (*see*: Hancock, column 1, lines 22-25). The codes of the location address of Hancock do not enable data that represent geographic features to be searched using a latitude and a longitude. Rather, the location address itself is similar to a latitude and longitude. That is, the location address provides a location on the earth according to the grid reference system similar to a latitude and longitude providing a location on the earth. Accordingly, the location represented by a latitude and longitude may be converted into a universal location address and vice versa. The location address of Hancock does not allow the data stored in a geographic database to be spatially searched; rather, the data stored in a geographic database cannot be spatially searched using codes of the location address.

Additionally, Applicants have amended Claim 1 to clarify the term rank. Specifically, Claim 1 now recites that the data representing geographic features are organized into layers based on a rank associated with the represented geographic features and the data contained in the geographic database that represent geographic features are searchable for the rank. The Office Action indicated that rank was disclosed by Hancock in the form of the hierarchical codes, such as US and GA in the universal location address. Applicants respectfully submit that the hierarchical codes in Hancock are not the rank associated with the geographic features as recited in the amended claim. As known to one skilled in the art of geographic databases, a rank may be associated with geographic features. For example, a lowest rank (e.g., 0) is associated with those features (e.g., side streets and alleys), and a highest rank is associated with the most important features (e.g., expressways). (*see*, Specification, page 2, lines 13-20).

Appl. No. 09/706,937

Amdr. dated September 30, 2005

Request for continued examination following final Office action of June 30, 2005

Furthermore, the Office Action cited Beesley as disclosing the level in detail. (See, Final Office Action, page 5). Beesely does not disclose Applicants' amended claim element of the third dimension including rank information. Rather, Beesely discloses a system and method for packing cartographic data into a database using a range-tree (R-Tree) index structure. (*see*: Beesely, column 1, lines 4-12). The R-Tree index structure of Beesely does not have a third dimension including rank information; rather Beesely's index merely includes information representing a minimum bounding rectangle of the region indexed. (*see*: Beesely, column 2, lines 13-18). Although Beesely does disclose layers of data (*see*: Beesely, column 4, lines 19-20), the R-Tree does not have the third dimension including rank information.

Because Hancock and Beesley fail to disclose or suggest every claim element, Applicants' independent Claim 1 is not obvious in view of the cited references.

Independent Claim 2

Applicants' independent Claim 2 was rejected as being anticipated by Hancock. Applicants submit that Hancock does not anticipate amended Claim 2 for similar reasons as discussed above in conjunction with Claim 1. Specifically, Claim 2 recites an index for a geographic database whereby the geographic data are searchable spatially using a latitude and a longitude. As discussed above, the location address of Hancock merely provides a location on the earth according to the grid reference system similar to a latitude and longitude providing a location on the earth globe. The location address of Hancock does not allow the data stored in a geographic database to be spatially searched; rather, the data stored in a geographic database cannot be spatially searched using codes of the location address.

Because Hancock fails to disclose or suggest every claim element, Hancock does not anticipate Applicants' independent Claim 2.

Independent Claim 14

Applicants' independent Claim 14 was rejected as being obvious in view of the combination of Hancock and Beesely. Applicants submit that Claim 14 is not obvious in view of the combination for similar reasons as discussed above in conjunction with Claim 1.

Appl. No. 09/706,937

Amdt. dated September 30, 2005

Request for continued examination following final Office action of June 30, 2005

Specifically, Claim 14 recites an index for a geographic database whereby the geographic data are searchable spatially using a latitude and a longitude. As discussed above, the location address of Hancock merely provides a location on the earth according to the grid reference system similar to a latitude and longitude providing a location on the earth. The location address of Hancock does not allow the data stored in a geographic database to be spatially searched; rather, the data stored in a geographic database cannot be spatially searched using codes of the location address. Additionally, neither Hancock nor Beesely disclose the data of the geographic database being searchable for a property of the indexed data using the third dimension.

Because the combination fails to disclose or suggest every claim element, Claim 14 is not obvious in view of Hancock and Beesely.

Dependent Claims 3-6 and 8-13

Applicants' Claims 3-6 and 8-13 are dependent claims that distinguish the cited references at least for the same reasons explained above in connection with their independent base claims. In addition, these claims recite further features and limitations that are neither disclosed nor suggested by these references.

Conclusion

All the issues in the office action, dated June 30, 2005 have been addressed. Favorable consideration of the present application is requested. If any issues remain, the Examiner is invited to call the undersigned.

Respectfully submitted,



Jon D. Shutter
Reg. No. 41,311
Patent Counsel

NAVTEQ North America, LLC
222 Merchandise Mart Plaza, Suite 900
Chicago, IL 60654
(312) 894-7000 x7365